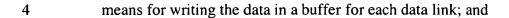## CLAIMS

What is claimed is:

1.   1.   A method for inverse multiplexing over an asynchronous transfer mode (ATM)

2.   network comprising:

3.   receiving data on one or more data links;

4.   writing the data in a buffer for each data link; and

5.   reading the data from the buffer for each data link faster than the data is written

6.   into the buffer.

1.   2.   The method of claim 1, wherein the receiving the data includes receiving an

2.   asynchronous transfer mode (ATM) data cell.

1.   3.   The method of claim 1, wherein the receiving data includes receiving the data on

2.   one or more T1/E1 data links.

1.   4.   The method of claim 1, further comprising:

2.   deleting a slow link such the delay caused by the slow link is reduced.

1.   5.   The method of claim 4, further comprising:

2.   adding a fast link after the slow link is deleted.

1 6. An inverse multiplexing system comprising:

2   one or more interfaces to receive data;

3   a buffer for each interface to store the data; and

4   a controller to write the data in the buffer for each interface and to read the data

5 from the buffer for each interface faster than the data is written into the buffer.

1 7. The inverse multiplexing system of claim 6, wherein the data includes an

2 asynchronous transfer mode (ATM) data cell.

1 8. The inverse multiplexing system of claim 6, wherein interface is to interface with

2 T1/E1 data links.

1 9. The inverse multiplexing system of claim 6, wherein the controller is to stop

2 receiving data from an interface that is interfaced with a slow data link such that the delay

3 caused by the slow data link is reduced.

1 10. The inverse multiplexing system of claim 9, wherein the controller is to add an

2 interface to receive data for a fast data link after stopping receiving data from the

3 interface that is interfaced with the slow data link.

1 11. A machine-readable medium that provides instructions, which if executed by a

2 processor, cause the processor to perform an operation comprising:

3   receiving data on one or more data links;

14

4   writing the data in a buffer for each data link; and

5   reading the data from the buffer for each data link faster than the data is written

6   into the buffer.

1   12.   The machine-readable medium of claim 11, further providing instructions, which

2   if executed by the processor, cause the processor to perform an operation comprising:

3   receiving an asynchronous transfer mode (ATM) data cell.

1   13.   The machine-readable medium of claim 11, further providing instructions, which

2   if executed by the processor, cause the processor to perform an operation comprising:

3   receiving the data on one or more T1/E1 data links.

1   14.   The machine-readable medium of claim 11, further providing instructions, which

2   if executed by the processor, cause the processor to perform an operation comprising:

3   deleting a slow data link such that a delay caused by the slow data link is reduced.

1   15.   The machine-readable medium of claim 11, further providing instructions, which

2   if executed by the processor, cause the processor to perform an operation comprising:

3   adding a fast data link after the slow link is deleted.

1   16.   A system for inverse multiplexing over an asynchronous transfer mode (ATM)

2   network comprising:

3   means for receiving data on one or more data links;

15

4   means for writing the data in a buffer for each data link; and

5   means for reading the data from the buffer for each data link faster than the data is

6   written into the buffer.

1   17.   The system of claim 16, wherein the means for receiving the data includes means

2   for receiving an asynchronous transfer mode (ATM) data cell.

1   18.   The system of claim 16, wherein the means for receiving data includes means for

2   receiving the data on one or more T1/E1 data links.

1   19.   The system of claim 16, further comprising:

2   means for deleting a slow link such the delay caused by the slow link is reduced.

1   20.   The system of claim 18, further comprising:

2   means for adding a fast link after the slow link is deleted.